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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,170	02/14/2000	Kenji Hashimoto	04329.2230	6174

22852 7590 02/09/2004

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EXAMINER

DAVIS, ROBERT B

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 02/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/503,170

Applicant(s)

HASHIMOTO, KENJI 

Examiner

Robert B. Davis

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 12 January 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

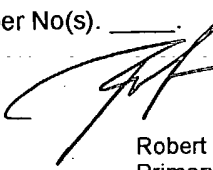
Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-4, 8-11, 22, 23, 25 and 26.

Claim(s) withdrawn from consideration: 15 and 18.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____.


Robert B. Davis
Primary Examiner
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Continuation of 2. NOTE: The amendments to claim 1 attempt to change the scope of the claim in regards to the retaining section which retains a carrier instead of a semiconductor device. Such a limitation would require new consideration. Attachment.

Response to Arguments

1. Applicant's arguments filed 1/12/2004 have been fully considered but they are not persuasive. Applicant argues that there is no motivation to combine the admitted prior art and Lin et al (5,587,342) and that there would have been no reasonable expectation of success in combining the admitted prior art and Lin et al. The examiner respectfully disagrees as detailed below. Applicant states the following reason for the lack of motivation and reasonable success in combining the references, in that the admitted prior art teaches an apparatus which encapsulates a chip by extruding resin adjacent an opening in a mask and then using a squeegee to extrude the resin into the opening in the mask and that Lin et al extrudes material directly into the openings of a mask that is formed from a photo-resist layer. The arguments also point out that the photo-resist layer is later removed and that the references differ fundamentally in the method and apparatus for masking a chip and dispensing materials onto a semiconductor chip. The arguments also point out that the admitted prior art discloses a separate mask that can be relocated and that Lin et al disclose a stationary mask that is later removed.

The examiner would like to point out that the claims under consideration are apparatus claims and any reference to a varying method is irrelevant. The operation of the devices of the admitted prior art and the Lin et al reference by the applicant are correct and the reason why the examiner made an obviousness rejection instead of an anticipation rejection. The Lin et al reference clearly teaches direct extrusion of an encapsulant into the openings of a mask and then removing the tail of the dots (shown

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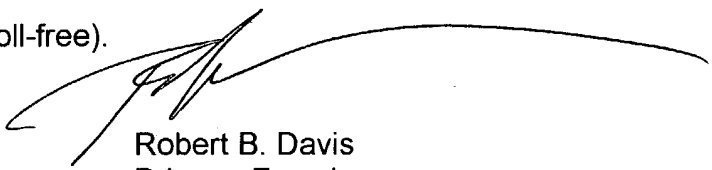
in figure 5) with a squeegee. The benefits of this type of extrusion are clear to one of ordinary skill in the art over the method of extruding directly onto the mask and then using a squeegee to extrude the material into openings of the mask. The direct extrusion of the encapsulant into the mask openings allows the tail of the dot to be moved by the squeegee as opposed to the entire encapsulant material as in the admitted prior art. It should be noted that the Lin et al reference also discloses extrusion of the material onto a mask and then using the squeegee to move the encapsulant into the openings, so even if direct extrusion into the mask openings is not seen as an improvement it is clearly an equivalent to extrusion onto the mask. One of ordinary skill in the art would readily consider the direct extrusion into the mask openings as a more streamlined manner of providing encapsulant and an equivalent to extrusion onto the mask. Both the admitted prior art and the Lin et al reference disclose using a mask for directing the encapsulant to the chips and the examiner does not consider that the different manner of placing the masks in correlation to the chips as a reason to doubt success of the combination.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert B. Davis
Primary Examiner
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